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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,038	06/29/2006	Nels R. Smith	026032-5081	6065
23428 7590 08/30/2010 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER				
OCHYLSKI, RYAN M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/585,038

Applicant(s)

SMITH ET AL.

Examiner

RYAN OCHYLSKI

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This is a non-final Office Action in response to Applicant's Request for Continued Examination of July 16, 2010, which was in reply to an Advisory Office Action mailed on May 21, 2010. Claims 18, 28, and 35 have been newly-amended, and no Claims have been newly-canceled or added.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 18, 2010 has been entered.

Claim Objections

3. Claims 18, 28, and 35 are objected to because of the following informalities: To better clarify each Claim's meaning in light of the newly-made amendments to each, the Examiner suggests the following modifications: In Line 18 of Claim 18, Line 24 of Claim 28, and Line 26 of Claim 35, insert --the second resin-- between "bonding" and "to the first resin and the first edge of the formed skin." Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. The Examiner notes that provisional application 60/534,314 to which Applicant claims priority does not disclose any embodiments comprising multiple mold projections

or multiple shut-off members, and thus such subject matter will be accorded the same filing date as that of the International Application -- namely, January 3, 2005.

Additionally, the newly-amended limitation (that a first edge of the formed skin extends outward past the first projection toward the second mold section such that a free end of the first edge faces the first shut-off member, and that injecting a second resin is done while the first edge of the formed skin remains extended past the first projection) do not appear to have sufficient support in the aforementioned provisional application to grant the provisional application's filing date thereto, and thus all pending claims are currently accorded the January 3, 2005 filing date.

8. Claims 18-20, 22, and 24-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraiwa et al. (US 2002/0017360) in view of Mizuno (JP 2001-191361), and further in view of either of Boyer (US 2008/0157432 A1, hereinafter Boyer) or Smith et al. (US 2008/0073813 A1, hereinafter Smith).

The applied Boyer and Smith references have a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the references, they constitute prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the references was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the references, prior to the respective effective U.S.

filing dates of the references under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and references are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

9. Regarding Claims 18-20, 22, and 27-29 Hiraiwa et al. teaches a method of making a vehicle door panel ("adapted for production of an interior door trim panel M" [0030]), the method comprising:

- providing a first mold section (Item 20), a second mold section (Item 10), a first projection extending from the first mold section toward the second mold section (Item 22), a second projection extending from the first mold section (Item 23) and a first shut-off member opposite the first projection and movable between a first position and a second position (Item 35);
- providing a first cavity defined by a first portion of the first mold section, the first projection, a first portion of the second mold section, and the first shut-off member when in the first position (the cavity in which Item 54 is present in Figure 3);
- positioning a formed skin having a first edge and a second edge, and comprising a flexible sheet and a compressible material coupled to at least a portion of the flexible sheet ("surface skin material 53 is in the form of a surface skin layer 53a such as a

synthetic resin sheet ... with a foamed layer 53b such as a foamed sheet of elastic synthetic resin ... Similarly, the surface skin material 54..." [0032]; also see [0044]) in the first cavity proximate the first mold section so that the first edge of the formed skin extends past the first projection and so that the second edge of the formed skin extends past the second projection; (see the general configuration of Item 54 in relation to Items 22 and 23 in Figures 3 and 4, and the specific configuration of Item 54 in relation to Item 22 in Figure 5, wherein the Examiner considers an edge extending past a portion of a projection to comprise an edge extending past the projection; see also Figures 15-17 which indicate that it would be known to make the second edge extend past the second projection during the injection process, as well)

- injecting a first resin, which bonds to the formed skin, into the first cavity between the formed skin and the first portion of the second mold section and between the first portion of the first mold section and the first portion of the second mold section so that an outer surface of the vehicle component is provided by the formed skin and by the first resin (as per the positioning of resin 51A/51 in Figure 4);
- moving the first shut-off member, which comprises a recess to receive the first edge of the formed skin ("lateral recess 35a" [0047]), from the first position to the second position to provide a second cavity defined by a second portion of the first mold section, a second portion of the second mold section, the first edge of the formed skin, the first resin, and the first shut-off member when in the second position (the cavity in which Item 53 is present in Figure 3 – specifically the portion wherein Item 53 does not overlap with Item 54, and wherein the Examiner notes that portions

defining a cavity are not necessarily portions that an injected resin must come in contact with); and

- allowing the first resin to fill the second cavity (as indicated by the Figure 4 resin).

However, Hiraiwa et al. do not teach injecting a second resin into a second cavity defined by the first edge of the formed skin that is extended past the first projection, thereby bonding the second resin to the first resin and the first edge of the formed skin.

In analogous art pertaining to vehicle trim manufacturing, Mizuno teaches injecting a second resin into a second cavity – after a first resin has been injected into a first cavity – on top of a formed skin that is extended past a first projection such that the second resin bonds to both the first resin and the edge of the formed skin for the benefit of preventing poor molding (see Figure 9 and paragraphs [0029]-[0031]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply Mizuno to Hiraiwa et al. such that the first edge of Hiraiwa et al.'s formed skin 54 is placed on top of Hiraiwa et al.'s formed skin 53 to extend past the first projection and, instead of allowing the first resin to fill the second cavity, a second resin is injected into the second cavity to bond to both the first resin and the edge of formed skin that is maintained to be extended past the first projection for the benefit of preventing poor molding that may result from the shut-off member of Hiraiwa et al. opening too soon and allowing the formed skins to come apart slightly.

However, while Hiraiwa shows in Figure 12 and 13 that in alternative embodiments, formed skin extends outwardly past the first projection toward the first

shut-off member, the hypothetical combination does not expressly teach that the first edge of the formed skin remains extended past the first projection toward the first shut-off member while injecting the second resin.

In analogous art pertaining to vehicle trim manufacturing, Boyer (in Figures 4 and 5) and Smith (in Figures 6 and 7) show that it is known and predictable to make it so that a placed formed skin 122 remains in the same extended position relative to a projection 146 both before and after the injection of a resin.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply the known injection configurations of Boyer and Smith to the previous combination such that the previous combination's skin edges are also predictably embedded past the projection, as per Boyer and Smith.

10. Regarding Claim 24, while this hypothetical combination does not expressly teach that the first resin at least partially solidifies before the second resin is injected, the Examiner considers that since Mizuno shows in Figure 9 that after retracting shut-off member 31, the resin 53 stays in place, a skilled artisan would be motivated to ensure that the first resin is at least partially solidified when the second resin is injected in order to best apply Mizuno to Hiraiwa et al. to prevent poor molding that might occur if the formed skin did not have partially solidified resin to hold it in place.

11. Regarding Claims 25 and 26, Hiraiwa et al. teach the "substrate 51 of the trim panel is covered with a soft touch surface skin..." [0051], a disclosure that the Examiner

takes to indicate that the formed skin is positioned in an area of the vehicle component that may be interfaced by a user and partially provides an "A" surface of the vehicle component, since the Examiner further considers that Hiraiwa et al. would not be concerned with the appearance of the formed skin seam unless the formed skin was part of an "A" surface, and that Hiraiwa et al. would also not be concerned with a very soft touch surface skin, unless the surface skin was intended to be interfaced by a user.

12. Regarding Claims 30-34 Mizuno is silent on the relationship between the two injected resins. Thus – given that when injecting a resin in two different places, each of the two portions of resin used must be either the same resin or a different resin, and either the same color or a different color – a skilled artisan would have found it obvious to try all four of the limited options with respect to resin identity and resin color, particularly since one resin portion would likely remain hidden from view by the formed skin so that the resin could be chosen completely based on non-visual performance attributes, and the other resin portion, since it would not be hidden entirely from view by the formed skin, would be chosen with visual performance attributes in mind.

13. Claim 21 (as applied to Claim 20 above) and Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraiwa et al. (US 2002/0017360), Mizuno (JP 2001-191361), and Boyer/Smith, and further in view of Ae et al. (JP 2002-187166).

14. Regarding Claim 21, the previous combination teaches the general method as applied above, but does not teach injecting a third resin into a third cavity defined by a third portion of the first mold section, third portion of the second section, a portion of the first resin disposed between the first mold section and the second mold section, a second shut-off member that is arranged in a closed position opposite a third projection.

In analogous art pertaining to vehicle trim manufacturing, Ae et al. teach adding a third part to a two-part trim molding (as in Figure 6, which comprises a) for the benefit of providing an integral multi-color article (as per the Abstract).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply Ae et al. to the previous combination by essentially duplicating the first projection, first shut-off member, and second cavity into a third projection, second shut-off member, and third cavity on the opposite side of the mold and injecting a third resin into the third cavity that would bond to the first resin for the benefit of providing an integral multi-color trim part.

15. Regarding Claims 35 and 36, the hypothetical combination as applied above to Claims 18-21 meets all the limitations of Claim 35, since Claim 35 is essentially Claim 21 rewritten as an Independent Claim and Claim 36 is identical to Claim 19 except for its dependency.

16. Regarding Claim 37, Hiraiwa et al. teach in Figures 15-17 (wherein for the purposes of the discussion below, the top of each respective figure coincides with the

respective Fig. 15, Fig. 16, and Fig. 17 text on the drawing sheet) that a second member capable of acting as shut-off member comprises

- a forward surface (the protruding portion 36a as best shown in Figure 16),
- a first side surface (the bottom surface of the member),
- a second side surface that shares an edge with the forward surface (the top surface of the member),
- and an angled surface that extends between the forward surface and the first side surface (the flat-angled portion between 36a and the bottom surface);
- and wherein, if that member were to be used as the second shut-off member (in conjunction with a protrusion like Item 23) for the hypothetical combination as applied to Claim 35 above, the step of injecting a third resin would comprise forming an angled recess in the molded article having an upper surface provided by the angled surface of the second shut-off member and provided at a sufficiently flat angle relative to vertical by the angled surface of the shut-off member to obscure the interface between the first resin and the third resin from an occupant of the vehicle interior.

A skilled artisan would be motivated to use the shut-off member from Hirwaiwa et al.'s Figures 15 and 16 as claimed, since an explicit intent of the combination projection/shut-off member production method recited by Hiraiwa et al. (as per the Abstract) is to make it so "each boundary line of the different portions is hidden in a groove or valley provided in the substrate of the trim component." Thus, the skilled

artisan would be motivated to use the shut-off member from Hirwaiwa et al.'s Figures 15 and 16 to better hide the boundary between the two differently-colored resin portions.

17. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraiwa et al. (US 2002/0017360), Mizuno (JP 2001-191361), and Boyer/Smith as applied to Claim 18 above, and further in view of Dailey et al. (US 6,248,200).

18. Regarding Claim 23, the previous combination teaches the general method as applied above, but does not teach that the formed skin comprises a flexible sheet and a compressible material coupled to a portion of the flexible sheet, and wherein the step of injecting the first resin into the first cavity and bonding to the formed skin comprises injecting the first resin into the first cavity and bonding to the flexible sheet and to the compressible material to provide a first compressible region where the first resin is bonded directly to the skin and a second compressible region where the first resin is bonded directly to the compressible material.

In analogous art pertaining to vehicle trim manufacturing, Dailey et al. teach a formed skin comprising a flexible sheet and a compressible material coupled to a portion of the flexible sheet, and wherein a step of injecting a resin into a cavity and bonding to the formed skin comprises injecting the resin into the cavity and bonding the resin to the flexible sheet and to the compressible material to provide a first compressible region where the first resin is bonded directly to the skin and a second compressible region where the first resin is bonded directly to the compressible material

for the benefit of providing a relatively soft integral arm rest pad in trim panel assembly (Column 3 Lines 16 – Column 4 Line 4).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to combine Dailey et al. with the previous combination for the benefit of providing a relatively soft integral arm rest pad in trim panel assembly.

Double Patenting

19. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory

double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

20. Claims 18-22 and 24-37 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 38-62 of copending Application No. 10/569,225 in view of Hiraiwa et al. (US 2002/0017360), Mizuno (JP 2001-191361), and Boyer/Smith. While '225 does not claim a formed skin, the combination of Hiraiwa et al., Mizuno, and Boyer/Smith teaches a formed skin as claimed in the instant application, as applied in the rejections above.

21. Claim 23 (as applied to Claim 18 above) is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 38-62 of copending Application No. 10/569,225 in view of Hiraiwa et al. (US 2002/0017360), Mizuno (JP 2001-191361), and Boyer/Smith and further in view of Dailey et al. (US 6,248,200) – see the rejection of Claim 23 above.

22. These are provisional obviousness-type double patenting rejections.

Response to Arguments

23. Applicant's arguments with respect to Claims 18-37 have been considered but are moot in view of the new ground(s) of rejection.

The Examiner additionally notes that Applicant's amendment did not necessarily overcome the previously-applied art as previously indicated. (Hiraiwa's Figures 12 and 13 show that extending formed skin outwardly past a projection toward a shut-off member is known, and Mizuno's Figure 9 shows that it would be expected that such a configuration would persist for at least some of the time while the second resin is injected. Applicant should additionally note the configuration shown in Figure 17 of the previously-cited Yamamoto reference (US 6,827,895 B1), which could be construed as having a skin member extending outward past a projection, and remaining extended upon resin injection.)

However, to continue to move prosecution forward, the Examiner has included the newly-found Boyer/Smith references (which clearly show the maintaining of an extended skin during resin injection) in the rejections above, in the case that Hiraiwa and Mizuno alone do not render the instant claims obvious. If Applicant overcomes the commonly-assigned Boyer/Smith references and would like to ensure entry of claim language that does overcome the previously-applied art, the Examiner would accommodate such an interview request.

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN OCHYLSKI whose telephone number is 571-270-7009 and whose direct fax number is 571-270-8009. The examiner can normally be reached on Monday through Thursday and every other Friday from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on 571-272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

rmo

/Joseph S. Del Sole/
Supervisory Patent Examiner, Art Unit 1791